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(54) Resin-impregnated belt for application on papermaking machines and in similar industrial applications

(57) A resin-impregnated endless belt for a long nip press or calender of the shoe type, or for other papermaking and paper-processing applications, has a base fabric in the form of an endless loop with an inner surface, an outer surface, a machine direction and a cross-machine direction. The base fabric has machine-direction (MD) structural elements and cross-machine-direction (CD) structural elements in an open structure wherein at least some of the MD structural elements and CD structural elements are spaced apart from one another. The MD structural elements cross the CD struc-

tural elements at a plurality of crossing points, where they are joined to one another by mechanical, chemical or thermobonding means. A coating of a first polymeric resin is on the inner surface of the base fabric. The first polymeric resin impregnates and renders the base fabric impermeable to liquids, and forms a layer on the inner surface thereof. The coating is smooth and provides the belt with a uniform thickness. A method for manufacturing the belt, using a smooth and polished cylindrical mandrel with a spacer ring slidably disposed thereon, is also shown.

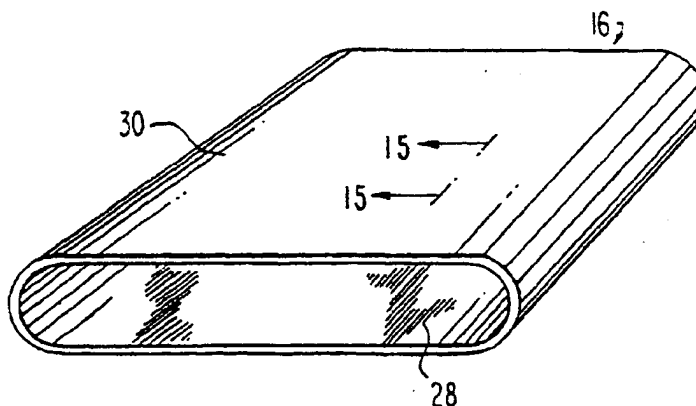


FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 98 66 0133

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 659 934 A (APPLETON MILLS) 28 June 1995 * the whole document *	1,2,6, 16,17	D21F3/02
A	DE 92 01 143 U (VOITH) 26 March 1992 * the whole document *	1-3,6	
A	GB 2 287 484 A (SCAPAP GROUP) 20 September 1995 * the whole document *	1,2,6	
P,A	EP 0 859 082 A (VOITH SULZER PAPIERMASCHINEN) 19 August 1998 * the whole document *	1,2,6	
A	DE 41 25 279 A (VOITH) 3 December 1992 * the whole document *	57	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			D21F
Place of search		Date of completion of the search	Examiner
THE HAGUE		10 June 1999	De Rijck, F
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ON EUROPEAN PATENT APPLICATION NO.**

EP 98 66 0133

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10-06-1999

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 659934	A	28-06-1995	EP	0658649 A	21-06-1995
			FI	945850 A	15-06-1995

DE 9201143	U	26-03-1992	NONE		

GB 2287484	A	20-09-1995	AU	1462595 A	03-10-1995
			CA	2185427 A	21-09-1995
			EP	0752026 A	08-01-1997
			FI	963087 A	05-08-1996
			WO	9525200 A	21-09-1995
			JP	9510266 T	14-10-1997

EP 859082	A	19-08-1998	DE	19706097 A	20-08-1998

DE 4125279	A	03-12-1992	AT	402172 B	25-02-1997
			AT	110792 A	15-07-1996
			CA	2070096 A	30-11-1992
			FI	922389 A	30-11-1992
			JP	5179594 A	20-07-1993
			SE	507598 C	22-06-1998
			SE	9201581 A	30-11-1992
			US	5290164 A	01-03-1994

EPO FORM P0459

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